

We claim:

1. An apparatus comprising a load limiting device which serves as a connection between a vehicle safety restraint and an anchor point, the load limiting device comprising a housing and a deformable member, at least one of which is configured for connection to a vehicle safety restraint and the other of which is configured for connection to the anchor point, the housing and the deformable member being moveable relative to each other in a predetermined manner when force is applied to one or the other of the housing and the deformable member, and the housing having a hardened member which is harder than the deformable member, the hardened member positioned to engage and deform the deformable member as the deformable member moves relative to the housing.

2. The apparatus of claim 1 wherein the housing comprises a pair of housing components which define an opening through which the deformable member is pulled and wherein the hardened member is (i) supported by the housing components, (ii) located in the opening in the housing and (iii) positioned to engage and deform the deformable member as the deformable member is being pulled through the opening in the housing.

3. The apparatus of claim 2, wherein the deformable member comprises a strip having a first portion configured for connection to a component of safety restraint system and a second portion having a stop; the strip having a central portion located between the first and second portions that is configured to be deformed in a predetermined manner when the strip is pulled through the housing and engaged by the hardened member.

4. The apparatus of claim 3, wherein the strip is formed of mild steel, and the hardened member comprises a ball made of hardened steel.

5. The apparatus of claim 3 wherein the strip is configured to deform in a digressive force manner as the strip is being pulled through the housing.

6. The apparatus of claim 5, wherein the strip has a central opening that progressively widens as the strip is pulled through the housing and engaged by the hardened member.

7. The apparatus of claim 3 wherein the strip is configured to deform in a relatively constant force manner as the strip is being pulled through the housing.

8. The apparatus of claim 7, wherein the strip has a central opening that has a relatively constant width, to enable the strip to deform in a relatively constant force manner, as the strip is pulled through the housing and engaged by the hardened member.

9. The apparatus of claim 7, wherein the central portion of the strip has a perforation, that facilitates initiation of deformation of the strip and enables the strip to deform in a relatively constant force manner, as the strip is pulled through the housing and engaged by the hardened member.

10. The apparatus of claim 3, wherein the strip is configured to deform in a progressive force manner as the strip is being pulled through the housing.

11. The apparatus of claim 10, wherein the strip has a central opening that progressively narrows as the strip is pulled through the housing and engaged by the hardened member.

12. The apparatus of claim 3, wherein the strip is configured to deform in a digressive step manner as the strip is being pulled through the housing.

13. The apparatus of claim 12, wherein the strip has a central opening that is initially constant in width and then progressively widens as the strip is pulled through the housing and engaged by the hardened member.

14. The apparatus of claim 1, wherein the deformable member is configured to deform in a digressive force manner as the deformable member is being moved relative to the housing.

15. The apparatus of claim 1, wherein the deformable member is configured to deform in a relatively constant force manner as the deformable member is being moved relative to the housing.

16. The apparatus of claim 1, wherein the deformable member is configured to deform in a progressive force manner as the deformable member is being moved relative to the housing.

17. The apparatus of claim 1, wherein the deformable member is configured to deform in a digressive step manner as the deformable member is being moved relative to the housing.